

Patent [19]

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[54] CHEMICAL MECHANICAL POLISHING WATER SYSTEM DISPERSION BODY FOR USE IN MANUFACTURING SEMICONDUCTOR DEVICES

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[51] Int. Cl.⁷ H01L021304 ; C09K00314; H01L02102**[57] ABSTRACT**

PROBLEM TO BE SOLVED: To obtain a chemical mechanical polishing water system dispersion body for use in manufacturing of semiconductor devices, in which a sufficient polishing rate is obtained and a face to be polished is not damaged.

SOLUTION: In this manufacturing method, these are contained polymer particles composed of various thermoplastic resins, etc., or polymer particles in which zeta potential is adjusted by introducing specified functional groups into these resins, and inorganic particles composed of alumina, silica, or the like, and the zeta potentials of the polymer particles and the inorganic particles are inverted in signs, and these form a condensable body, to form composite particles. This provides a chemical mechanical polishing aqueous dispersed body for use in manufacturing of semiconductor devices. Furthermore, a shearing force is added to this condensable body by a homogenizer, etc., so that it is coupled by electrostatic forces, thereby forming composite particles which are dispersed more uniformly.

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